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## What is claimed is:

## 1. An azo dye of formula

$$\begin{bmatrix} R_1 & N & \\ R_2 & N & \\ R_4 & N & O \end{bmatrix} (SO_3)_n^- M_n^+$$

$$(1)$$

## wherein

 $R_1$  is -CN, -COOR<sub>5</sub>, -CONR<sub>6</sub>R<sub>7</sub> or a heterocyclic ring,  $R_2$  is unsubstituted or substituted alkyl, unsubstituted or substituted aryl, -CF<sub>3</sub>, -COOR<sub>5</sub>, -CONR<sub>6</sub>R<sub>7</sub> or -COR<sub>5</sub>,  $R_3$  is hydrogen, -SO<sub>3</sub>M, alkyl, alkoxy, alkylcarbonyl, -NO<sub>2</sub> or halogen,  $R_4$  is substituted aryl, substituted heteroaryl or an aryl-N=N-aryl radical, wherein one or both of the aryl radicals in aryl-N=N-aryl is/are unsubstituted or substituted, or a radical heteroaryl-N=N-heteroaryl, wherein one or both of the heteroaryl radicals in heteroaryl-N=N-heteroaryl is/are unsubstituted or substituted or substituted or substituted aryl,  $R_6$  is hydrogen, alkyl or unsubstituted aryl,  $R_6$  is hydrogen, alkyl or unsubstituted or substituted aryl,  $R_7$  is hydrogen, alkyl or unsubstituted or substituted aryl,  $R_7$  is hydrogen, alkyl or unsubstituted or substituted aryl,  $R_7$  is hydrogen, alkyl or unsubstituted or substituted aryl,  $R_7$  is hydrogen, alkyl or unsubstituted or substituted aryl,  $R_7$  is hydrogen, alkyl or unsubstituted or substituted aryl,  $R_7$  is hydrogen, alkyl or unsubstituted or substituted aryl,  $R_7$  is hydrogen, alkyl or unsubstituted or substituted aryl,  $R_7$  is number 1, 2 or 3.

- 2. An azo dye according to claim 1, wherein R<sub>1</sub> is -CN or -CONH<sub>2</sub>.
- 3. An azo dye according to either claim 1 or claim 2, wherein  $R_2$  is methyl, isopropyl, -CF<sub>3</sub>, phenyl or p-methoxyphenyl.
- 4. An azo dye according to any one of claims 1 to 3, wherein  $R_3$  is hydrogen, chlorine or  $SO_3M$ .
- 5. An azo dye according to any one of claims 1 to 4, wherein  $R_4$  is phenyl substituted by methyl and/or by methoxy and/or by -NO<sub>2</sub> and/or by -CF<sub>3</sub> and/or one or more times by -SO<sub>3</sub>M, or is phenyl-N=N-phenyl, wherein one of the phenyl radicals or both phenyl radicals independently of one another is/are unsubstituted or substituted as indicated above.

- 6. An azo dye according to any one of claims 1 to 3, wherein  $R_4$  is naphthyl substituted one or more times by -SO<sub>3</sub>M.
- 7. An azo dye according to any one of claims 1 to 6, wherein the cation  $M^{+}$  is Primene 81,  $N^{+}[(CH_2)_3CH_3]_4$ ,  $N^{+}(C_{16}H_{33})(CH_3)_3$  or  $N^{+}(C_{10}H_{21})_2(CH_3)_2$ .
- 8. An azo dye according to claim 1 of formula

$$(H_{3}CH_{2}CH_{2}CH_{2}CH_{2}C)_{4}N^{+}$$

$$O_{3}S$$

$$N = N$$

9. An azo dye according to claim 1 of formula

10. An azo dye according to claim 1 of formula

$$(H_{3}CH_{2}CH_{2}CH_{2}CH_{2}CH_{3})_{4}$$

$$(H_{3}CH_{2}CH_{2}CH_{2}CH_{2}CH_{3})_{4}$$

$$O_{3}S \longrightarrow N = N \longrightarrow N$$

$$O_{3} \longrightarrow N = N$$

$$O_{3} \longrightarrow N = N$$

$$O_{4} \longrightarrow N$$

$$O_{5} \longrightarrow N$$

$$O_{7} \longrightarrow N$$

$$O_{7} \longrightarrow N$$

$$O_{8} \longrightarrow$$

11. A process for the preparation of an azo dye of formula (1) according to claim 1, in which a compound of formula

$$R_4-NH_2 \tag{50}$$

is diazotised and coupled to a coupling component of formula

$$R_2 = \begin{pmatrix} N \\ N \end{pmatrix}_{m}$$
 (51),

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub> and m are as defined for formula (1), the diazo component and/or the coupling component containing at least one sulfo group, which is subsequently neutralised with a suitable base containing the cation M<sup>+</sup>.

- 12. A process for the production of coloured plastics or polymeric colour particles, in which one or more azo dyes of formula (1) according to claim 1 is/are incorporated into those materials.
- 13. Use of an azo dye of formula (1) according to claim 1 in the production of coloured plastics or polymeric colour particles.
- 14. The coloured plastics or polymeric colour particles according to claim 12.
- 15. An aqueous wood stain comprising an azo dye of formula (1) according to claim 1.
- 16. A process for colouring wood, in which an aqueous wood stain according to claim 15 is used.
- 17. Use of an aqueous wood stain according to claim 15 in the colouring of wood.
- 18. Wood coloured according to claim 16.
- 19. A purely solvent-containing wood stain comprising an azo dye of formula (1) according to claim 1.

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- 20. A process for colouring wood, in which a purely solvent-containing wood stain according to claim 19 is used.
- 21. Use of a purely solvent-containing wood stain according to claim 19 in the colouring of wood.
- 22. Wood coloured according to claim 20.
- 23. A process for dyeing or printing semi-synthetic or synthetic hydrophobic fibre material, especially textile material, in which one or more azo dyes according to claim 1 is/are applied to the mentioned material or incorporated therein.
- 24. A process according to claim 23, in which the hydrophobic material, especially textile material, consists of polyester fibres.
- 25. Material dyed or printed according to claim 23.